

# Anti-MMP2 Rabbit Monoclonal Antibody

Catalog # ABO13324

## Product Information

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|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC                                                                                                             |
| <b>Primary Accession</b> | <a href="#">P08253</a>                                                                                              |
| <b>Host</b>              | Rabbit                                                                                                              |
| <b>Isotype</b>           | Rabbit IgG                                                                                                          |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                   |
| <b>Clonality</b>         | Monoclonal                                                                                                          |
| <b>Format</b>            | Liquid                                                                                                              |
| <b>Description</b>       | Anti-MMP2 Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

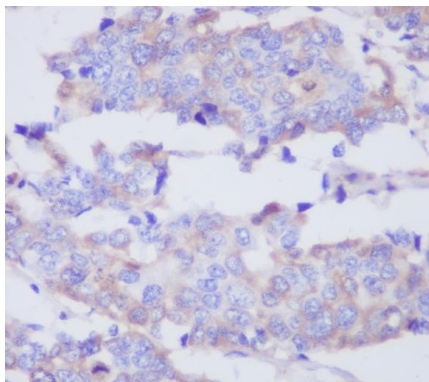
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| <b>Gene ID</b>                  | 4313                                                                                                                                                                                                                                                                     |
| <b>Other Names</b>              | 72 kDa type IV collagenase, 3.4.24.24, 72 kDa gelatinase, Gelatinase A, Matrix metalloproteinase-2, MMP-2, TBE-1, PEX, MMP2, CLG4A                                                                                                                                       |
| <b>Calculated MW</b>            | 73882                                                                                                                                                                                                                                                                    |
| <b>Application Details</b>      | WB 1:500-1:1000<br>IHC 1:50-1:200                                                                                                                                                                                                                                        |
| <b>Subcellular Localization</b> | Isoform 1: Secreted, extracellular space, extracellular matrix. Membrane. Nucleus. Colocalizes with integrin alphaV/beta3 at the membrane surface in angiogenic blood vessels and melanomas. Found in mitochondria, along microfibrils, and in nuclei of cardiomyocytes. |
| <b>Tissue Specificity</b>       | Produced by normal skin fibroblasts. PEX is expressed in a number of tumors including gliomas, breast and prostate..                                                                                                                                                     |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                                                      |
| <b>Clone Names</b>              | Clone: BBA-13                                                                                                                                                                                                                                                            |
| <b>Immunogen</b>                | A synthesized peptide derived from human MMP2                                                                                                                                                                                                                            |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                                                                                                                                  |
| <b>Storage</b>                  | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.                                                                                                                               |

## Protein Information

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|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | MMP2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Synonyms          | CLG4A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Function          | Ubiquitinous metalloproteinase that is involved in diverse functions such as remodeling of the vasculature, angiogenesis, tissue repair, tumor invasion, inflammation, and atherosclerotic plaque rupture. As well as degrading extracellular matrix proteins, can also act on several nonmatrix proteins such as big endothelial 1 and beta- type CGRP promoting vasoconstriction. Also cleaves KISS at a Gly- -Leu bond. Appears to have a role in myocardial cell death pathways. Contributes to myocardial oxidative stress by regulating the activity of GSK3beta. Cleaves GSK3beta in vitro. Involved in the formation of the fibrovascular tissues in association with MMP14. [Isoform 2]: Mediates the proteolysis of CHUK/IKKA and initiates a primary innate immune response by inducing mitochondrial- nuclear stress signaling with activation of the pro-inflammatory NF- kappaB, NFAT and IRF transcriptional pathways. |
| Cellular Location | [Isoform 1]: Secreted, extracellular space, extracellular matrix. Membrane. Nucleus Note=Colocalizes with integrin alphaV/beta3 at the membrane surface in angiogenic blood vessels and melanomas. Found in mitochondria, along microfibrils, and in nuclei of cardiomyocytes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Tissue Location   | Produced by normal skin fibroblasts. PEX is expressed in a number of tumors including gliomas, breast and prostate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Images



Immunohistochemical analysis of paraffin-embedded human breast adenocarcinoma, using MMP2 Antibody.

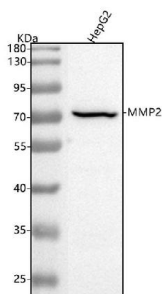


Figure 1. Western blot analysis of MMP2 using anti-MMP2 antibody (M00286-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HepG2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MMP2 antigen affinity purified monoclonal antibody (Catalog # M00286-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The

signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MMP2 at approximately 95 kDa. The expected band size for MMP2 is at 74 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.